

Claims

- 1 1. A rapid coupling comprising
2 a bush (10);
3 a pipe nipple (12) adapted to be inserted into the bush (10) and having on
4 its outer surface an engagement section (17, 28) of reduced or increased dia-
5 meter; and
6 a locking element (23) which is provided in the bush (10) and which, upon
7 engagement with the engagement section (17, 28) of the pipe nipple (12), retains
8 the latter in the coupled state in the bush (10),
9 **characterised** in that the locking element (23) is disposed at such a loca-
10 tion adjacent to an insertion end (13) of the bush (10) that, in the uncoupled state,
11 the engagement section (17, 28) is located outside the bush (10).
- 1 2. The rapid coupling of claim 1 comprising a compression spring disposed
2 between an inner stop (18) of the bush (10) and an insertion end (16) of the pipe
3 nipple (12),
- 1 3. The rapid coupling of claim 1 or 2, wherein the engagement section of the
2 pipe nipple (12) is formed as a groove (17), and a recess (24) is provided in the
3 bush (10), the recess (24) having three successive regions (25...27) with
4 diameters decreasing in the axial direction toward the insertion end (13) of the
5 bush (10), the diameter of the inner region (25) being at least equal to the outer
6 diameter of the pipe nipple (12) plus twice the radial thickness of the locking
7 element (23), and the diameter of the centre region (26) corresponding to the
8 diameter of the groove (17) plus twice the radial thickness of the locking element
9 (23).
- 1 4. The rapid coupling of claim 3, wherein the diameter of the outer region (27)
2 of the recess (24) is larger than the outer diameter of the pipe nipple (12) to an
3 extent which enables an unlocking tool to be inserted.
- 1 5. The rapid coupling of claim 3 or 4, wherein the locking element is a resilient
2 locking ring (23), the inner diameter of which, in the relieved state, is smaller than
3 the outer diameter of the pipe nipple (12).
- 1 6. The rapid coupling of claim 1 or 2, wherein the engagement section of the
2 pipe nipple (12) is formed as a projection (28), and a recess (34) with two succes-
3 sive regions (35, 37) is provided in the bush (10), the diameter of the outer region

4 (37) adjoining the insertion end (13) of the bush (10) corresponding to the outer
5 diameter of the projection (28), and the diameter of the inner region (35) being at
6 least equal to the outer diameter of the projection (28) plus twice the radial thick-
7 ness of the locking element (23).

1 7. The rapid coupling of claim 6, wherein the locking element is a resilient
2 locking ring (23), the inner diameter of which, in the relieved state, is smaller than
3 the outer diameter of the projection (28) of the pipe nipple (12).